

# NORTHWOODS JOURNAL – APRIL 2022

## HELLO, SPRINGTIME!

*A Free Publication about Enjoying and Protecting Marinette County's Outdoor Life*

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### Wisconsin Youth Conservation Camps Back for Summer 2022!

<https://wisconsinlandwater.org/our-work/youth-education/conservation-camp>



#### **After at 2-year hiatus due to COVID, Wisconsin Youth Conservation Camps are back!**

Two unique conservation summer camp opportunities are available for middle and high school students this summer in Wisconsin. *Youth in neighboring states are welcome to attend.* These camps provide fun outdoor experiences, help foster an appreciation for nature, and introduce a variety of opportunities in natural resources and conservation careers. Natural resource professionals present programs on wildlife, habitat, water quality, soils, forestry, outdoor skills, and more. Engaging speakers and interesting topics give campers an opportunity to participate in hands-on activities, learn outdoor skills, make new friends, participate in typical 'summer camp' experiences, and enjoy Wisconsin's beautiful outdoors.



**Middle school youth** (entering 6-8th grade in fall) are invited to attend the **WI Land+Water Middle School Conservation Camp**, held June 15-June 18, 2022 at Upham Woods Outdoor Learning Center, Wisconsin Dells (Juneau County). The registration fee is \$200.00, and registration is due May 31 (fee increases to \$250.00 after registration deadline). Fee includes lodging, meals, snacks, t-shirt, and all activities/programs. To learn more, and to register, visit online at <https://wisconsinlandwater.org/our-work/youth-education/conservation-camp/middle-school-camp-registration>.

**High school youth** (entering 9-12th grade in fall; must be 17 or under) are invited to participate in the **WI Land+Water High School Conservation Camp**, June 20-June 23, 2022 at the North Lakeland Discovery Center in Manitowish Waters (Vilas County). Wildlife programs, habitat restoration projects, daily field trips, teambuilding activities, and hands-on activities provide an in-depth look at natural resources management and careers. Registration fee is \$350.00, and is due May 31 (fee increases to \$400.00 after registration deadline)

and includes all programs, meals, snacks, lodging and a t-shirt. To learn more, visit: <https://wisconsinlandwater.org/our-work/youth-education/conservation-camp/high-school-camp-registration>.

Students are encouraged to apply for the Brad Matson Memorial Conservation Camp Scholarships. Find more information at <https://wisconsinlandwater.org/our-work/youth-education/conservation-camp>.



Students can also contact their local County Land Conservation Department to see if they offer camp scholarships:

<https://wisconsinlandwater.org/members-hub/members>.



To learn more about both camps, view the camp brochures at: <https://wisconsinlandwater.org/our-work/youth-education/conservation-camp>.

For questions, contact Kim Warkentin at the Wisconsin Land+Water at 608-441-2677 or email [kim@wisconsinlandwater.org](mailto:kim@wisconsinlandwater.org). Registrations are first-come, first-served, and space is limited at both camps.



For more about WI Land + Water youth education: [www.facebook.com/WILandWaterYouthEd/](https://www.facebook.com/WILandWaterYouthEd/)



## 16 Ways to Celebrate 60 Minutes of Daylight!

<https://pages.tinkergarten.com/spring-forward/>



On Sunday, March 13th we all were happy to turn the clocks an hour ahead to 'spring forward'. Here's how to celebrate the 60 extra minutes of daylight we experience - a great chance to slow down for a moment, celebrate nature and help kids learn to embrace change! Visit the website to learn more about each activity.

### 1. Make Suncatchers to catch the extra daylight



### 2. Search for signs of spring in your biome



Once March begins, wherever you live, you can start to sense the shift from winter to spring. Download or print a worksheet to help your family search for signs of spring and read more about what to look for! This activity is featured in our free monthly activity calendar. Don't have a copy yet? Get one at [tinkergarten.com/calendar/](https://pages.tinkergarten.com/calendar/)!

### 3. Take a family adventure

#### 4. Make shapes of joy from nature treasures

One fun way to keep kids always ready to make shapes is to keep an eye out for shapes in nature. In this activity, kids embark on a nature shape-hunt and then use the shapes from nature to create and explore joyful shapes of their own.



### 5. Whip up bubble juice and make some bubble joy

### 6. Jump for joy!

### 7. Be a star!

### 8. Play with your shadow



### 9. Puddle stomp in the rain

### 10. Make ribbon kites fly



### 11. Spin until you get dizzy

### 12. Roll down a hill – then repeat

### 13. Climb a tree, or log, or anything



### 14. Have an animal dance party



### 15. Host an outdoor tea party



### 16. Do something that brings your family joy



Visit <https://pages.tinkergarten.com/> for more outdoor ideas for families and kids! 😊

## Earth Day is April 22

<https://www.earthday.org/>



### All TOGETHER now!

This is the moment to change it all - the business climate, the political climate, and how we take action on climate. Now is the time for the unstoppable courage to **preserve and protect our health, our families, our livelihoods...** together, we must 'Invest in Our Planet'.

Because a **green** future is a **prosperous** future.

**We need to act (boldly), innovate (broadly), and implement (equitably).** It's going to take all of us. **All in.** Businesses, governments, and citizens — everyone accounted for, and everyone accountable. **A partnership for the planet.**



And while there is still time to solve the climate crisis, time to choose BOTH a prosperous and sustainable future, and time to restore nature and build a healthy planet for our children and their children, **time is short.**

The Earth Day 2022 Theme is *Invest in Our Planet*. What Will You Do? Explore the website to find information on Earth Day events, activities, and what individuals and organizations can do to make a difference.

Smart companies are discovering that it is no longer a choice between going green and growing long-term profits - sustainability is the path to prosperity. So for both humanitarian and business reasons, it is imperative that companies of all sizes take action and embrace the benefits of a green economy.

As individuals, we have the simple yet effective power to make our voices heard through our choices, our civic actions, and our personal interactions. What each of us does, and how we do it, has a huge ripple effect on our ecosystems, and on the pace of corporate and government action.





## How to Plant a Pollinator Pot

<https://mdc.mo.gov/magazines/xplor/2022-03/how-plant-pollinator-pot>  
(adapted for Wisconsin)



American copper butterfly on a Coreopsis (tickseed)

Biologists are worried because bee and butterfly numbers are dropping – and loss of habitat is a big reason why. It doesn't take a ton of space to bring back the buzz. You can help by planting a pot of native wildflowers. Pollinators are not only bees and butterflies – moths, wasps, flies, beetles, and even hummingbirds can be pollinators too.

### Pick Power Flowers

Native wildflowers grow naturally in prairies, forests, and other wild areas. You should use natives because they're adapted to our weather and they provide the best food for bees and butterflies. To find what kinds of plants to put in your pot, use the Audubon plant finder at <https://www.audubon.org/native-plants> or visit <https://www.gardenia.net/guide/great-pollinator-plants-for-wisconsin>.

### Find a Large, Deep Pot

Native wildflowers have deep roots and need more space than non-native flowers. A pot that's 18 inches across will hold about three wildflowers. If you have smaller pots, you can plant one wildflower in each pot and group them together.



### Add Soil

Fill your pot with potting soil, leaving an inch of free space below the lip of the pot so dirt won't run off when you water. *Don't add fertilizer!* It will make natives grow too tall and floppy.

### Plant Your Flowers

Space each seedling about 6 inches away from other plants in the pot. Water the soil as needed, but don't drown them. Natives are adapted to our summer climate.



Red (or swamp) milkweed

### Planting Recipes

The plants in these "recipes" were chosen because they don't mind tight spaces, look nice together, and bloom from spring to fall. It's best to buy seedlings (baby plants) because they bloom faster than seeds.

Full sun (at least 8 hours of sun a day)

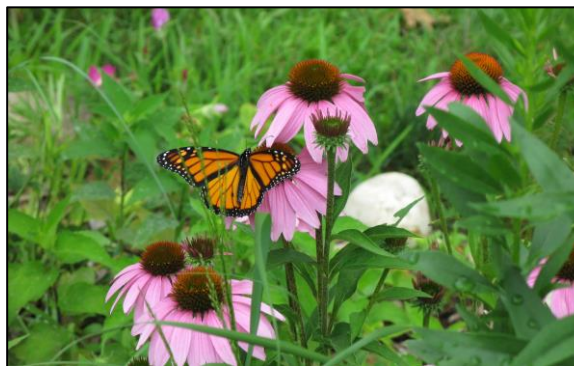
- Purple coneflower, lanceleaf coreopsis, golden alexanders, blanketflower

Partial sun (4 to 6 hours of sun a day)

- Wild bergamot, wild geranium, white turtlehead, swamp (red) milkweed

Shade (Less than 4 hours of sun a day)

- Jacob's ladder, columbine, bloodroot



Monarch butterfly on purple coneflower

### Flower Farmers

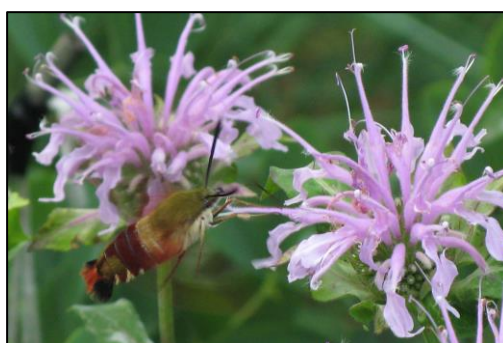
Bees, butterflies, and other pollinators are nearly as important as sunlight and water to a plant. When pollinators fly from plant to plant, they transfer pollen from one flower to another. Flowers use the pollen to make seeds, which grow into new plants. More than 150 crops in the United States depend on pollinators. Foods such as apples, strawberries, and tomatoes wouldn't exist without these busy flower farmers.



Ruby-throated hummingbird at a Columbine

*For more about pollinators and how to welcome them to your home, visit:*

- ✓ <https://hort.extension.wisc.edu/articles/pollinators/>
- ✓ <https://dnr.wisconsin.gov/topic/endangereresources/pollinators.html>
- ✓ <https://xerces.org/publications/plant-lists/pollinator-plants-great-lakes-region>
- ✓ <https://pollinators.msu.edu/resources/pollinator-planting/>
- ✓ <https://www.gardendesign.com/eco-friendly/wildlife.html>



Clearwing hummingbird moth at wild bergamot

## Land Information Department Seeks Summer Help!



### Job Description:

Assist Land Information Department to protect water quality, manage invasive species, improve habitats, document best management practices for agricultural and forest lands, provide environmental education programs, and maintain department equipment.

Four positions available, two focusing on AIS (aquatic invasive species) control. Workday may include working outside, specifically in boat, canoe or kayak.



**Qualifications:** high school diploma or equivalent (prefer coursework or college credits in conservation field), and insurance acceptable driver's license.

### Hours:

Roughly 470 total hours, up to 40 hours/week, May – September (flexible). \$16.00 per hour. Equal opportunity employer.

### How to Apply:

Submit Resume, including position title, to: Human Resources Department 1926 Hall Avenue Marinette, WI 54143, or email to [mcresume@marinettecounty.com](mailto:mcresume@marinettecounty.com). Position open until filled.



## WDNR ANNUAL SPRING PUBLIC HEARING AND COUNTY MEETING

Wisconsin Conservation Congress  
<https://dnr.wisconsin.gov/about/wcc/springhearing>

Citizens will be able to provide input on Wisconsin's natural resource issues through the 2022 Spring Hearings which will again be online beginning April 11, 2022 (starting at 7:00 pm) and remain open through 7:00 pm on April 14, 2022. Information on the questions being asked, how to participate, and how citizens can introduce a resolution will be posted here as it becomes available. With the Spring Hearings online, elections for delegates will not be held this year, but the WCC is taking applications through March 11 to fill current and future vacancies. Visit the [local delegate page](#) for more information.



### Northwoods Journal Online

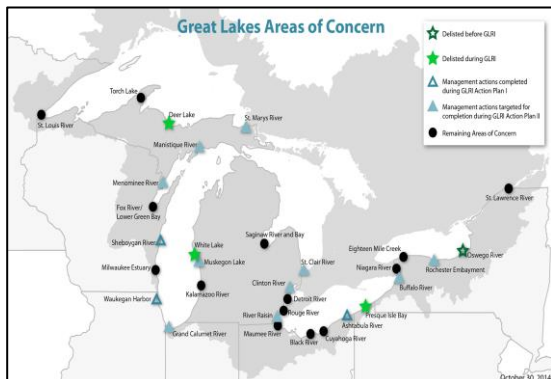
Want to read issues of the *Northwoods Journal* online? Go to [www.marinettecounty.com](http://www.marinettecounty.com) and search for 'Northwoods Journal'. We can also send you an e-mail reminder when each new issue is posted online, or you can get a copy mailed to you. Contact Anne Bartels, Information & Education Specialist at 715-732-7784 or email [abartels@marinettecounty.com](mailto:abartels@marinettecounty.com).



## Speeding Cleanup of Pollution at 'Areas of Concern' on Wisconsin's Waterways

Excerpts from <https://pbswisconsin.org/news-item/speeding-cleanup-of-pollution-at-areas-of-concern-on-wisconsins-waterways/>

One target of the 2021 federal infrastructure package is a decades-long effort to remediate industrial contamination in five locations in the state where rivers and estuaries flow into the Great Lakes — conservationists are hopeful the funding will accelerate this restoration process.



A 2022 map shows the status of Great Lakes "Areas of Concern" in the United States as of January 2022. There are five locations in Wisconsin, with different levels of status in terms of their management. (Courtesy of the U.S. EPA)

In 1987, the United States and Canada identified dozens of sites where contamination posed an ongoing threat, dubbing them "Areas of Concern." These include five sites in Wisconsin, each tracked by the Department of Natural Resources: the [St. Louis River](#), the [lower Menominee River](#), [lower Green Bay and the Fox River](#), the [Sheboygan River and harbor](#) and the [Milwaukee estuary](#).

Pollution at these sites is extensive, and cleaning it up is a complex, time-consuming and expensive endeavor — **over the past 35 years, the lower Menominee River is the only one of the five where cleanup has met its restoration goals.**



Above, contaminated sediment is dredged from the Menominee River in 2014; below, sediment is treated at the staging area to prepare it for transportation offsite.



Now, with \$1 billion of the infrastructure law's funding [allocated](#) toward accelerating the cleanup of the remaining Areas of Concern around the Great Lakes, the other four sites are slated to be restored by 2030. The funding builds on the [Great Lakes Restoration Initiative](#), which has boosted federal funds for cleaning and protecting the Great Lakes since 2010.

"This is a gamechanger," said Steve Galarneau, program director for the DNR's [Office of Great Waters](#). The office oversees environmental cleanup and protection along Wisconsin's Great Lakes and Mississippi River shorelines.



Restored area after completing the dredging project.

While cleaning up Areas of Concern has steadily progressed over the last decade, Galarneau said some of the most complex and expensive work remains to be done. In particular, he pointed to an enormous volume of sediment laden with heavy metals and harmful chemicals like PCBs ([polychlorinated biphenyls](#)) that still needs to be removed from all four sites. This includes more than 1.7 million cubic yards of contaminated sediment in the Milwaukee estuary, which encompasses stretches of the Milwaukee, Menomonee and Kinnickinnic rivers.

Polluted sediments are directly harmful to ecosystems and wildlife, but they also pose challenges for remaining manufacturers by reducing water depth and limiting navigational channels. Because some of the sediment is so toxic, restrictions on navigational dredging are in place, and dredging for cleanup purposes is tightly controlled.



A clamshell dredge forms a tight seal around the sediment as it is removed from the river.

"We are looking at some very big, complex issues with contaminated sediment," Galarneau said. Not only does the sediment need to be removed via careful dredging, it then needs to be safely decontaminated and landfilled in a way so any lingering pollution doesn't continue to pose a threat, he said. On top of that, the dredging is occurring in some of Wisconsin's busiest waterways where boating traffic must be closely managed. He said the new infrastructure funding would ultimately make dredging and other cleanup less expensive by speeding the process.

"It's an incredibly positive thing for the Great Lakes and certainly for Green Bay," said Mike Mushinski, a conservationist for the [Brown County Department of Land and Water Conservation](#). Significant progress has been made in recent years to restore the lower Green Bay and Fox River, including removal of more than 8 million cubic yards of sediment. Mushinski said contaminated sediment continues to be "the big outstanding issue."

- <https://www.epa.gov/great-lakes-aocs/lower-menominee-river-aoc>
- <https://www.greatlakesmud.org/tyco---menominee-river-aoc.html>
- <https://dnr.wisconsin.gov/topic/GreatLakes/Menominee.html>

## County Park Stickers Available at Marinette County Libraries for Senior Citizens & Veterans

[https://www.marinettecounty.com/parks/permits\\_and\\_passes/general/2022\\_annual\\_park\\_sticker/](https://www.marinettecounty.com/parks/permits_and_passes/general/2022_annual_park_sticker/)

Senior/Veteran's discounted stickers now on sale at the Marinette County Courthouse and all Marinette County Libraries.

- \$25 per sticker per vehicle
- Senior Citizen/Military discount - \$12.00 - sold at the Marinette County Courthouse with proof of I.D. or at any Marinette County Library
- Vendors will not offer discounts
- Discontinued - second sticker for free for Marinette County Residents

Discounted annual park sticker locations:

- Marinette County Courthouse, Parks office – 1926 Hall Ave, Marinette, WI 54143
- Any Marinette County Public Library - Coleman/Pound, Crivitz, Goodman, Marinette, Niagara, Peshtigo and Wausaukee. Please visit <https://www.marinettecountylibraries.org/branches> for addresses.

## Want to Provide 'the Best Nest' for Spring Songbirds? Here are some Tips.

<https://www.birdsandblooms.com/birding/attracting-birds/bird-nesting/bird-nesting-material/>



Growing plants that offer shelter and leaving natural debris around your yard for bird nesting material are the best ways to care for nesting birds.

**Twigs** - An abundant material in yards with trees, twigs can be left where they fall or stacked in a tidy pile.

**Moss** - Keep moss from blowing away by sticking this nesting material in a crevice of a tree or shrub.

**Dried Grass Clippings** - Be cautious about using treated grass clippings. Fertilizers and pesticides have the potential to harm birds.

**Dead Leaves** - To keep dead leaves in place, mix them in with heavier materials such as sticks.

**Plant Fluff** - The white down from cottonwood trees or cattails is a valuable soft material for nests.

**Straw** - In spring when it's too warm to serve suet, stuff strands of straw into a suet feeder for birds to pluck as nesting material.

**Pine Needles** - Dried needles are among the bluebird's preferred nesting materials.

### Avoid these unsafe bird nesting materials:

- **Plastics:** Bits of plastic will not break down, contributing to pollution.
- **Yarn or string:** Strands get caught on birds and become dangerous.
- **Dryer lint:** Birds stuff this in their nests, but it dissolves in rain.
- **Human hair:** Just like yarn or string, it's strong and can wrap around baby and adult birds.





## These Wild Animals Can Help Guard Your Garden

<https://www.treehugger.com/wildlife-can-guard-your-garden-4868466>



Growing food isn't about green-thumbng our nose at Mother Nature; it's about knowing her well enough to enlist her assistance. For home gardeners, that often means avoiding broad-spectrum pesticides, since they tend to kill more than just pests. But it doesn't necessarily mean leaving our gardens unguarded. On top of defensive measures like fencing, traps, or repellents, wise gardeners cultivate not only crops but also a habitat for wildlife that naturally keeps pests in check.

To fully embrace this approach, you may want to explore the big-picture ideas of [biodynamic agriculture](#) and [integrated pest management](#) (IPM) and to encourage pollinators as well as predators and parasites. It's also worth noting the animals in this list are not panaceas, and depending on species and context, some can even be pests. For a primer on their potential benefits, though, here are a few examples of creatures that can help you guard your garden.

**Ants** - Many ants are farmers themselves, having raised crops and livestock for millions of years. That won't compel them to help us - some species herd crop pests like aphids, for instance - but it does illustrate how complex and influential ants can be. Not only do ants offer indirect benefits like making and aerating soil (which is more important than it might sound), but they can also fend off an array of more irksome insects. Ants have also been found to rival chemical pesticides in protecting crops such as mango, cocoa, and citrus.



**Bats** - Summer evenings are often a great time to work in your garden, although mosquitoes can quickly put a damper on crepuscular cultivation. It's pretty hard to focus on gardening while you're fending off hordes of bloodthirsty flies.

Fortunately, some local wildlife may be happy to help. Just one little brown bat, for example, can eat hundreds of mosquito-sized flies in a single night. Insect-eating bats may not be a silver bullet - it's still unclear how much they can suppress mosquito populations on their own - but as a 2018 study found, certain species (namely the little brown bat) [really are prolific predators of mosquitoes](#).



And that's not all. Aside from mosquitoes, insect-eating bats also eat many moths whose caterpillars directly threaten crops. Just by eating corn earworm moths, for instance, bats save U.S. corn farmers roughly \$1 billion every year. (And, like bees and butterflies, some fruit-eating bats are also important pollinators.) If you'd like to enjoy the benefits of bats, [consider these tips for attracting and housing them](#).

**Songbirds** - Birds, like most animals on this list, are not easily pigeonholed. While some tend to run afoul of farmers - hence the ancient tradition of making scarecrows, for example - avian visitors often thanklessly protect our farms and gardens. Lots of songbirds prey on crop pests like caterpillars, beetles, snails, and slugs, especially when they have hungry mouths to feed in the breeding season. Many offer tangible benefits to people, such as [reducing leafhopper abundance by 50%](#) in vineyards, [cutting caterpillar damage in half](#) at apple orchards, or [saving coffee farmers up to \\$310 per hectare](#) by eating borer beetles, to name a few.



To lure more songbirds (like the Carolina wren above), it helps to know which insect-eaters live nearby and what they look for in a habitat. Native trees and shrubs can be a big draw, potentially tripling bird diversity in agricultural areas, although some birds are picky about things like tree type, height, foliage, and distance from water.

**Birds of prey** - Songbirds may eat insects, but what about bigger pests like squirrels, rabbits, rats, or moles? Or what if songbirds are raiding your garden instead of protecting it? To battle these bulkier bandits, many people simply befriend a different kind of bird. Birds of prey (also called 'raptors') include a variety of predators like falcons, hawks, and owls. Many species hunt precisely the varmints that covet our crops, sometimes even providing a clear boost to yields and profits.

The key is identifying your pest, knowing your local raptors, and finding the best bird for the job. If rabbits eat your kale after dark, for example, you might want to attract nocturnal owls, but if squirrels nab your tomatoes in broad daylight, the answer may be a falcon or hawk.

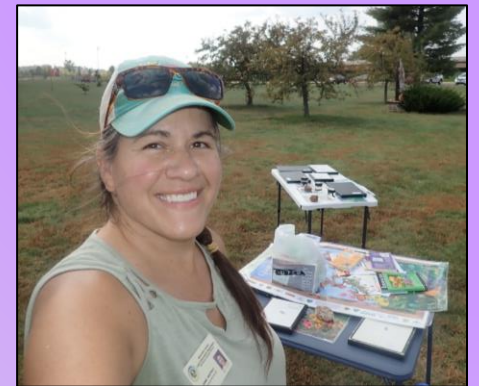


Some raptors are also better-suited to certain environments. A family of barn owls can eat 3,000 rodents in one four-month breeding cycle, but they prefer larger properties with open space for hunting. You could set up a

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## Wisconsin Land and Water Conservation Association Recognizes Anne Bartels for Youth Education

<https://wisconsinlandwater.org/conservation/awards>



Anne Bartels, Information & Education Specialist with the Land & Water Conservation Division (in the Land Information Department) has been awarded the 2022 'Brad Matson Youth Education Award for Outstanding Youth Educator'. Anne presents environmental education programs year-round in Marinette County for schools, day care facilities, adult groups, and public programs. The programs are referred to as "T.O.A.D. - Teaching Outdoor Awareness & Discovery".



This award is in honor of Brad Matson, Iron County LCC, and his work involving youth education and all of its programs. The Brad Matson Youth Education Award will carry on Brad's legacy which recognizes the importance of educating our youth about protecting and managing our natural resources for future generations.



Above: students explore "Skins & Skulls", a program about Wisconsin's mammals; below, snowshoeing at the Goodman School Forest.



The Wisconsin Land and Water Conservation Association (WI Land+Water) is a 501(c)(3) non-profit, membership organization that supports the efforts of around 450 land conservation committee (LCC) supervisors and 370 conservation staff in 72 county land and water conservation department (LWCD) offices.





Continued from page 5

nest box for them (or more than one, since they aren't territorial), or target a different species like barred owls, forest dwellers that also prowl wooded suburban areas.

**Dragonflies and damselflies** - Dragonflies and damselflies are expert aerial hunters, nabbing prey from midair with a success rate as high as 95%. They are especially beloved for feasting on mosquitoes, midges and gnats, a service that can make it much easier to spend quality time in your garden or other outdoor spaces during the summer.

These acrobatic hunters are also known to prey on adult moths and butterflies. That may be cold comfort if caterpillars are already eating your crops, but dragonflies and damselflies are still part of an IPM approach, or "an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques". If you want to attract dragonflies and damselflies to your property, having a pond or other water feature is a significant plus.



**Frogs, toads, & salamanders** - amphibians can be a blessing for farmers and gardeners. Most are opportunistic insectivores. As generalist predators, these amphibians may eat some beneficial insects like ladybugs, lacewings, or dragonflies. Yet herbivores often make easier prey, and since a single frog or toad may eat up to 100 insects per night, any crowds of leaf-eating pests in your garden would make a tempting feast.

Frogs and toads devour all kinds of beetles, flies, moths, caterpillars, and other insect larvae, as well as slugs and snails, providing a powerful check on garden thieves. Salamanders like the blue-spotted below, have similar palates, eating like herbivores but also favoring mosquitoes and ticks.



The key to attracting amphibians is to create a suitable habitat for them. That includes foliage and other covers from predators, sources of moisture and shade, and possibly a small pond (especially for frogs). It may also include a toad house or frog house, which can be as simple as an overturned flower pot to provide a cool, moist place to hide. And due to amphibians' permeable skin, they're highly sensitive to pesticides and pollutants, so chemicals should be avoided.

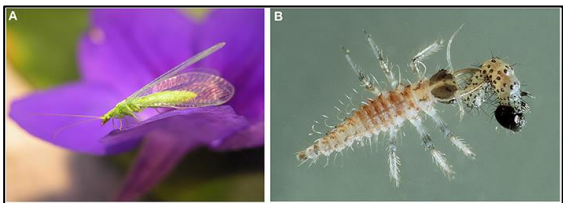


**Ladybugs** - Ladybugs, also known as lady beetles or ladybird beetles, are some of the most famously beneficial garden insects. They're beloved not just for their iconic appearance, but also for preying on aphids, scale insects, leafhoppers, mites and other crop pests. Some ladybugs can behave as pests themselves, either by damaging crops or [outcompeting native species](#), but overall these beetles are valuable allies. Just one ladybug can eat as many as 5,000 aphids during its life.



It's possible to buy kits of ladybugs to release in your garden, and while that may be fine, it's generally best to encourage existing wildlife rather than trying to start a local population from scratch. As with most beneficial wildlife, your garden should be free of insecticides that could harm helpful insects like ladybugs. It should also have aphids or other insects for them to eat, although that's presumably why you want ladybugs in the first place. And, since many ladybug species eat nectar and pollen as well as insects, it can help to grow plants whose pollen is popular with [ladybugs](#).

**Lacewings** - Like ladybugs, [green lacewings](#) are important predators of soft-bodied insects and insect eggs, according to University of Kentucky entomologist Ric Bessin, who writes that, while underappreciated, "their contribution to insect control is immense." Unlike ladybugs, however, green lacewings are not carnivores at all life stages. While both ladybug larvae and adults feast on aphids and other insects, green lacewings often shift from eating insects at a larval stage to eating nectar, pollen, and honeydew at an adult stage. The adults of some lacewing species do still eat insects, Bessin notes, but otherwise, their main role in pest control is producing more carnivorous larvae.



Lacewing larvae are also known as "aphid lions" or "aphid wolves," because they ravenously attack aphids and other soft-bodied insects with their large mandibles (pictured above at right). One lacewing larva can eat as many as 200 aphids per week, and may even cannibalize its fellow larvae if there isn't enough prey available.

**Snakes, lizards, and turtles** - Snakes have a knack for scaring people, making it hard for some gardeners to accept them as allies. Most snakes aren't venomous, though, and even those that mainly use venom to subdue prey, not for self-defense (*in Wisconsin, we have two - the timber rattlesnake and the eastern massasauga – but they are found mostly in specific habitats in the southwestern part of the state*). Most snakes are not only harmless to humans but also helpful in controlling pests that actually do cause us trouble (like this red-bellied snake).



Garter snakes, for example, are known to prey on crop-damaging herbivores like slugs, snails, and grasshoppers, as well as larger pests like rodents. As with many other animals in this list, the key to attracting beneficial snakes is to offer them a suitable habitat with shelter, a water source, and minimal chemicals.

If you just can't tolerate snakes, some other reptiles fill a similar ecological role. Many lizards, for example, feed on slugs, snails, and leaf-munching insects like beetles, caterpillars, and grasshoppers. In northeastern WI, we have just one species – the common five-lined skink. Juveniles have a blue tail that can break off to distract predators and then grow back. As adults they are more an olive green to tan color (bottom photo).



Turtles eat a variety of foods, mostly plants, although certain types - like North American box turtles - also eat garden pests such as snails, slugs, and beetles.

**Spiders** - Like bats and snakes, spiders are unfairly typecast as scary. They rarely bite people, and even when they do, most bites are only minor nuisances. Their venom is meant for much smaller prey, including insects that cause more trouble than any arachnid. [House spiders](#) patrol our homes for pests like flies, mosquitoes, fleas, and roaches, and outdoor spiders can play even more valuable roles in farms and gardens.

Your friendly neighborhood spiders come in several basic forms, each with its own pest-control superpowers. A wide array of web-weaving spiders, for example, set silky traps to ensnare aerial prey such as beetles, flies, mosquitoes, and moths. Many crab spiders – like the northern crab spider below - ambush prey - instead of weaving a web, they hide amid flowers until an unsuspecting insect shows up to be ambushed.



Some wolf spiders also rely on ambush hunting, but these robust arachnids are best-known for roaming around in search of prey, which can make them especially helpful for farmers and gardeners. That's also true for jumping spiders, impressive hunters armed with excellent vision and vibration-sensing abilities.

**Wasps** - Wasps are a diverse group of insects, with some offering more perks than others. Many predatory wasps actively hunt crop pests, but like other generalist predators in this

Continued next page



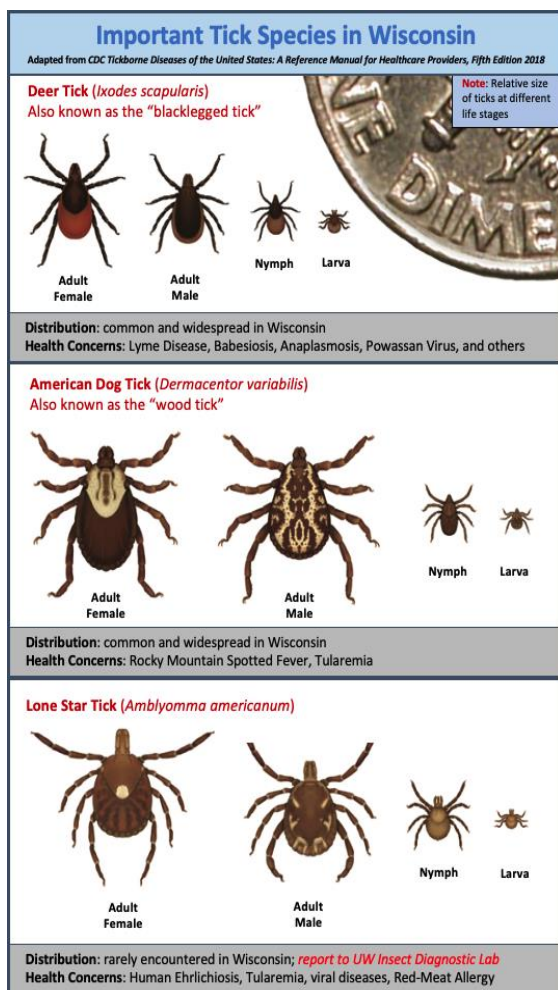


## The ABCs of Tick Season in Wisconsin

<https://insectlab.russell.wisc.edu/2021/05/05/the-abc-of-tick-season/>



As weather gets warmer and the outdoors beckons, people across Wisconsin are spending more time with the activities they wait for all winter long, including picnicking, hiking, camping, boating, fishing and more. While thoughts might be turning to filling the cooler with cold beverages and packing enough charcoal for the grill, there's another aspect to the season that demands attention: tiny ticks and their potential to cause big problems this time of the year.



Wisconsin is home to only a [few common tick species](#), but some [pose significant medical concerns](#) to both humans and pets, such as [Lyme disease](#). However, following the **ABCs of tick prevention** can help ensure that outdoor activities remain fun and safe for family and friends.

**Avoid:** Given their small size, ticks have limited mobility. To find hosts, ticks often hang out on plants — such as tall, weedy grasses along the edges of trails and in wooded areas with dense vegetation — and they wait for a mammal to pass by. Steering clear of these areas can help reduce the chances of encountering ticks in the first place.



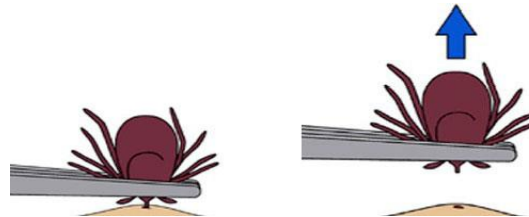
**Be aware:** Become familiar with [common ticks](#) and symptoms of [tick-borne illnesses](#) to know what to look for. Anybody bitten by a tick should get it properly identified and consult their health care provider about any potential medical concerns.

**Clothing:** Long-sleeved clothes provide a physical barrier to help prevent ticks from getting to skin. Wearing lighter-colored clothing such as khakis can also make it easier to spot darker-colored ticks. Tucking pants into socks can serve as an additional protection to make it harder for ticks to bite.



**DEET and other repellents:** A number of [Environmental Protection Agency-approved repellents](#) (such as [DEET](#)) can help keep ticks at bay when properly used. Always consult the product label for important usage instructions, such as application to skin versus clothing and how often to reapply. As another consideration, clothing can be treated with repellent products containing [permethrin](#). These products designed for clothing treatments are often sold at outdoor and camping stores and can provide long-term protection from ticks when properly used. Some outdoor clothing brands even use fabrics impregnated with permethrin to provide protection for extended periods of time, even through repeated washings.

**Examine:** Tick checks can be an important precaution *for both people and pets*. To effectively transmit the bacteria that cause Lyme disease, deer ticks have to be attached and feeding for extended periods of time, usually at least 24 hours. This time requirement for infection means that daily checks can help find and remove ticks before they've had a chance to transmit the bacteria. If a tick is found biting a person or pet, the best [removal method](#) is to use tweezers to grab near the tick's mouth parts and use a slow steady pull to remove it.



[https://www.cdc.gov/ticks/removing\\_a\\_tick.html](https://www.cdc.gov/ticks/removing_a_tick.html)

**Family pets:** Don't forget about four-legged friends — *pets that spend time outdoors can also be affected by tick-borne diseases*. Veterinarians should be consulted to select appropriate preventative tick (and flea) products. Topical repellent sprays are also available for those times people take their pets hiking in prime tick habitat. Pay special attention when selecting products for pets, as there are important differences between products available for dogs and cats. Always check with the veterinarian with any questions. Lyme disease vaccines for dogs are also available through veterinarians.



More information about ticks and tick-borne diseases is available through the [University of Wisconsin-Madison Department of Entomology](#) and the [Wisconsin Department of Health Services](#).

Continued from page 6, Garden Guardians

list, they can prey on beneficial insects, too, like bees.

That doesn't necessarily outweigh their benefits, but since some social wasps [aggressively defend their nest](#), a lot depends on species and setting. A few predatory wasps could help, but a yellow-jacket nest among your crops is likely more trouble than it's worth.

There are also other wasps, however, that offer a subtler form of pest control without the threat of painful stings. Known as [parasitoid wasps](#), these are highly diverse insects that often target specific garden pests as hosts for their offspring. Some use incredible tactics to find and control hosts, such as sniffing out chemicals in their feces or injecting a virus to weaken their immune systems. Certain parasitoid wasps are used as biological-control agents to combat major agricultural pests.



That long abdomen, or ovipositor, cannot sting you — it is strictly a mechanism for laying eggs. The female [American pelecinid wasp](#) inserts its ovipositor deep into the ground in order to locate June bug beetle larvae.

One such pest is the [tomato hornworm](#), a large and voracious caterpillar that can defoliate tomato plants with alarming speed. Hornworms are a popular host for some parasitoid wasps, which inject their eggs into the caterpillar and then fly away, leaving behind a brood to hatch inside the live host. The eggs soon release little wasp larvae, which feed on the hornworm until they're ready to pupate. The larvae then form visible cocoons outside the host's body (below).



The hornworm is still alive at this point and may continue walking around, but it has stopped eating. In fact, if you see a hornworm covered in tiny cocoons like this, the best way to protect your garden is to just leave it alone. Once the adult wasps emerge, they'll kill the host and patrol the area for other hornworms.

References for this article include:

- <https://www.gardendesign.com/landscape-design/wildlife.html>
- <https://birdwatchinghq.com/birds-of-prey-in-wisconsin/#hawk>
- <https://www.eekwi.org/animals/reptiles/snakes>
- <https://www.treehugger.com/beneficial-insects-5207627>
- <https://hort.extension.wisc.edu/articles/garden-spiders/>
- <https://www.treehugger.com/good-bug-bad-bug-how-can-you-tell-the-difference-4864052>





## National Oceanic & Atmospheric Administration - Great Lakes Aquatic Nonindigenous Species Information System

<https://cigl.seas.umich.edu/project/glansis-science-and-management-support/>

Aquatic nonindigenous species (ANS) are perhaps the greatest stressor currently facing the Great Lakes aquatic ecosystem, altering energy pathways, lowering food web and fisheries productivity, and costing millions of dollars annually in control and mitigation.

NOAA's Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) is a searchable database with fact sheets, threat assessments, and maps designed to improve stakeholder education, and inform prevention, management, and control of aquatic nonindigenous species (ANS). In this project, we propose to maintain, improve, and enhance GLANSIS to better inform managers of current and future threats from ANS.



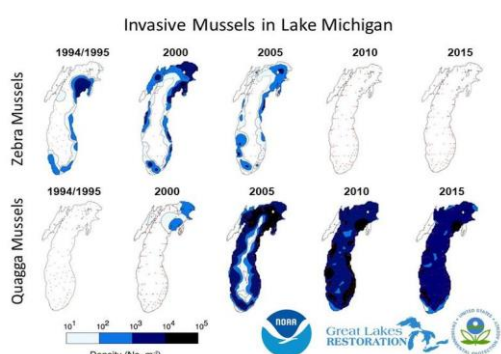
Check out the other videos in the "Managing Great Lakes Invaders" series:

- Managing Great Lakes Invaders: GLANSIS Series Part 1 ([https://youtu.be/sH\\_aXtOvAEs](https://youtu.be/sH_aXtOvAEs))
- Ballast Water: GLANSIS Series Part 2 (<https://youtu.be/Z4b9u-KRuOU>)
- Sea Lamprey: GLANSIS Series Part 3 (<https://youtu.be/hSeSmDUppSY>)
- Zebra and Quagga Mussels: GLANSIS Series Part 4 (<https://youtu.be/f2kAogNLUFM>)
- Invasive Carp: GLANSIS Series Part 5 (<https://youtu.be/RKaWlvuudDs>)

Visit the Land Information Facebook page for the links too!



Zebra mussels are native to the Black and Caspian seas of Western Asia and Eastern Europe and have spread across the world via shipping. Zebra mussels are invasive species to the Great Lakes and were first found in this system in 1988 when they were discovered in Lake St. Clair and the Detroit River.



Sea lampreys (*Petromyzon marinus*) entered the Great Lakes system in the 1800s through manmade locks and shipping canals. They were first discovered in Lake Ontario in 1835. Sea lamprey prey on commercially important fish species, such as lake trout, living off of the blood and body fluids of adult fish. During its life as a parasite, each sea lamprey can kill 40 or more pounds of fish.



Invasive carp, bighead carp and silver carp, were first brought to the southern United States to aid in the cleaning of fish hatcheries. Due to flooding and hatchery overflow, invasive carp were accidentally released into waterways and have now been flourishing in the Mississippi River basin for nearly 40 years.



They compete with native fish by devouring the planktonic food, the microscopic plants and animals at the base of the food web, causing extreme stress and ultimately an environment where the native fish struggle to survive.

Learn more about us:

- Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) - <https://www.glerl.noaa.gov/glansis>
- Great Lakes Environmental Research Laboratory - <https://www.glerl.noaa.gov/index.htm>
- Wisconsin Sea Grant - <https://www.seagrant.wisc.edu/>
- Michigan Sea Grant - <http://www.michiganseagrant.org>
- Great Lakes Sea Grant Network - <https://greatlakesseagrant.com>

## A Global Plastics Treaty is on the Way – United Nations

<https://grist.org/beacon/a-global-plastics-treaty-is-on-the-way/> & <https://www.unep.org/news-and-stories/story/what-you-need-know-about-plastic-pollution-resolution>

In early March, world leaders have agreed to write a binding treaty on plastic pollution. World leaders concluded the fifth United Nations Environment Assembly on Wednesday with a promise to the world: By 2024, delegates will broker a binding, international treaty addressing the full life cycle of plastics - including its production and design.



"We made history today," Espen Barth Eide, Norway's minister of climate and environment and president of the Assembly, told delegates. The United Nations conference in Nairobi, Kenya, has been branded the [most significant international environmental negotiation since 2015](#), when world leaders met to broker the Paris Agreement. For years, scientists, policymakers, and environmental advocates have urgently called for a comprehensive solution to the plastic pollution crisis, which — like climate change — is already exerting a [hefty toll](#) on [people](#) and the [natural world](#).



Delegates at the U.N. conference agreed to address the problem through a holistic "life cycle" approach, meaning the treaty they negotiate over the next two years could limit the amount of plastic the world is allowed to produce. There are some caveats: although the treaty itself will be binding, the resolution contains language allowing for binding and non-binding elements, and nations may have a lot of discretion over how they adhere to the treaty's terms.

Still, the treaty may prompt U.N. member states to adopt far-reaching measures to curb plastic pollution, potentially including national production caps or market-based mechanisms, like extended producer responsibility laws that force plastic manufacturers to pay for the pollution they create. This overall approach is in line with what scientists and environmental advocates have long stressed is the best way to curb pollution from plastics.

An intergovernmental negotiating committee still has to hammer out most of the treaty's important details, but environmental advocates the world over applauded the U.N. resolution. "It is a monumental and inspiring act," Graham Forbes, plastics global project leader for Greenpeace, told me. "They've set out a powerful intention to tackle the pollution crisis - that's what the world needs."





APRIL | 2022

# OUTDOOR ALMANAC

1

With warming weather, **Black-capped Chickadees** sing their sweet fee-bee, fee-bee as they prepare for nesting season. Don't confuse the sweet chickadee song with the Eastern Phoebe's more emphatic, raspy, whistled fee-BEE, which also starts about now.



17

**Painted Turtles** can be seen basking on logs or rocks, warming up after their winter stay at the bottom of ponds.



4

Great Blue Herons, Great Egrets, and Snowy Egrets return to marshes, joining the small population of overwintering Great Blue Herons.

19

Red Squirrels have shed their warm, deep-red winter fur. They are more olive green-to-brown during the warmer seasons.

22

Earth Day. The Lyrid meteor shower is expected to peak tonight.

6

Listen for **Spring Peepers** in wetlands; the persistent high-pitched whistles of large congregations fill the air after dusk.



25

Watch for **Ruby-throated Hummingbirds**. Early returning hummingbirds often feed from sap wells made by Yellow-bellied Sapsuckers. If you plan to put out a hummingbird feeder, this is the time to start.



10

Mourning Cloak butterflies overwinter as adults, sheltered under loose bark or in holes in trees. They emerge in spring before most flowers are open, so they feed on sap from deciduous trees and can also be found sipping on puddles in dirt paths and roads.

27

Chimney Swifts return. Listen for their chittering and rattling flight calls at dusk. In flight, Chimney Swifts appear pointed at both ends and are often described as cigars with wings.

12

Just before dawn breaks, listen for the Mourning Dove's "perch cooing" as they start the nesting season. This repeated, low-pitched song is frequently mistaken for an owl calling.

29

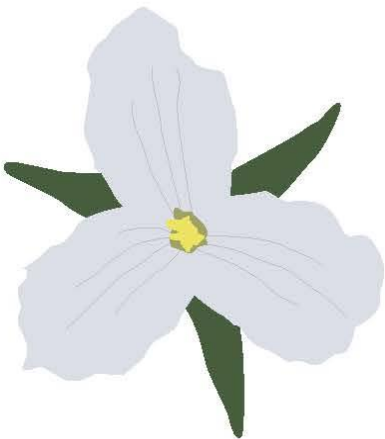
National Arbor Day. Look for the beautiful flowers of hickories and American Elm.

14

Eastern shadbush, also called serviceberry, blooms in wetlands and moist woodlands, creating clouds of white blossoms along riverbanks.

30

Search in woodlands for early wildflowers, such as trout lily, **trillium**, bloodroot, trailing arbutus, and hepatica.



16

Full moon



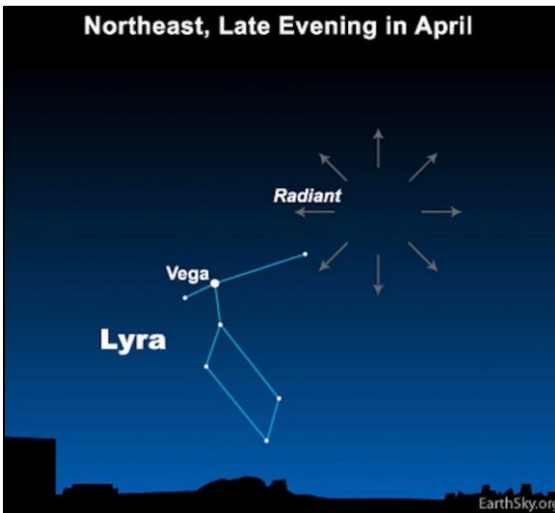
massaudubon.org



## 2022 Lyrid Meteor Shower in April

<https://earthsky.org/astronomy-essentials/everything-you-need-to-know-lyrid-meteor-shower/>

**When to watch:** Watch late evening until moonrise on the night of April 21-22, 2022. The predicted peak is 4 UTC on April 22. The peak of the Lyrids is narrow. And there's a bright moon in the sky on the peak morning. But note that it's a waning moon, so there will be less moon the following night (late evening April 22 to dawn April 23), and you might try that night, too.



Duration of shower: April 15 to April 29.

**Expected meteors at peak, under ideal conditions:** In a [dark sky](#) with no moon, you might see 10 to 15 Lyrids per hour.

**Note:** The Lyrids are known for uncommon surges that can sometimes bring rates of up to 100 per hour! About a quarter of Lyrid meteors leave persistent trains. A *meteor train* is an ionized gas trail that glows for a few seconds after the meteor has passed.

- <https://www.meteorshowers.org/>
- <https://www.amsmeteors.org/>





### Keep Wildlife Wild this Spring

<https://dnr.wisconsin.gov/topic/WildlifeHabitat/orphan>



Wisconsin's year-round outdoor activities bring people outside to enjoy the natural environment and have an opportunity to view and appreciate wildlife resources. Wild animals are valued by many, and it's important to observe them at a respectful distance to keep them wild and allow for their life in the wild to continue.



During the warmer months of spring and summer, the frequency of human-wildlife encounters increases, especially those involving young wild animals. While most of these encounters are harmless, there are times when well-intentioned people interfere in wildlife situations because they incorrectly assume a young animal is orphaned.

#### Five reasons to Keep Wildlife Wild

- 1. Stress:** Wild animals view people and domestic animals as predators and are highly stressed by the sights, sounds and smells of being in close proximity to humans or domestic animals. This stress can cause serious health problems and even death, for a wild animal.
- 2. Diet:** Wild animals have specialized dietary needs that are not easily met in captivity. Young wild animals especially require a specific, complete diet; otherwise, they are at a high risk of suffering serious nutritional deficiencies that can leave them deformed for life. [Do not feed a wild animal \[PDF\]](#) human food items because non-natural food items will most likely cause more harm and will not provide nutritional benefits.
- 3. Disease:** Wild animals carry many different diseases and parasites, some of which are transmissible to domestic animals and even humans.
- 4. Habituation or non-natural behavior development:** Wild animals need to learn normal social behaviors from their own species. Wild animals that learn non-normal behaviors from humans or domestic animals will likely not survive if they are released because they have not learned the correct survival skills, they have lost their natural fear of humans and predators and they may be abnormally habituated to human activity. As young animals grow into adults, they can still demonstrate dangerous wild animal behaviors that can threaten human and domestic animal safety.

**5. It's illegal:** Most wild animals are protected under state and federal laws and cannot be taken from the wild or possessed by unauthorized citizens. Raising a wild animal as a pet is not only against laws and regulations, but it is not doing the right thing for the animal. *Wisconsin's captive wildlife regulations allow a citizen to possess a wild animal for up to 24 hours for the purpose of transferring that animal to an **appropriately licensed individual**, such as a licensed wildlife rehabilitator or veterinarian. Even though wild animals are cute, they should **not** be viewed as pets.*

#### HOW YOU CAN HELP INJURED, SICK OR TRULY ORPHANED WILDLIFE

Wildlife rehabilitators are licensed individuals trained and equipped to provide temporary care and treatment to injured, sick and orphaned wild animals for the purpose of release back into the wild. ***Never attempt to rehabilitate wildlife on your own.*** Wild animals can carry diseases that can be transmitted to humans and pets. They are also capable of inflicting injury to themselves or others as they fight to defend themselves against a perceived threat (humans or pets). They have very specific dietary and housing requirements that are not easily met in captivity. Plus, **rehabilitating wildlife without a license is against the law in Wisconsin.**

*Contact a licensed [wildlife rehabilitator](#) immediately if you have determined that a wild animal is sick, injured or truly orphaned. Never attempt to rehabilitate wildlife on your own.*

**Contact a wildlife rehabilitator immediately, if any of the following apply.**

- The animal's parent is dead or no longer in the area (trapped and relocated).
- The animal has been attacked by a predator (dog, cat, another wild animal).
- The animal is bleeding and appears injured (bruises, punctures, cuts, broken bones).
- The animal is emaciated, very weak, cold or soaking wet.
- The animal has diarrhea.
- There are flies, fly eggs, maggots or many ticks, lice or fleas on the animal.
- The animal is in a dangerous location (busy street, parking lot). The image & caption image below is from a fawn rescue in Ohio.



Normally at this time of year we tell people to leave baby deer alone if they find them. Yesterday, the owner of Sittoo's Restaurant in North Olmsted called to report that he had a fawn stuck in a sewer grate behind the business that wasn't able to free itself. We had a couple of our camera shy officers respond along with the service department and they were able to work together to free the baby. The mother stood by around the corner just feet away as everyone worked to help. The mother was extremely thankful to be reunited with her young one. Great job everyone!!!

### Get to Know the Pint-sized Eastern Screech Owl!

[https://www.allaboutbirds.org/guide/Eastern\\_Screech-Owl/overview](https://www.allaboutbirds.org/guide/Eastern_Screech-Owl/overview)



Eastern Screech-Owls can be either mostly gray or mostly reddish-brown (rufous). They are patterned with complex bands and spots that give the bird excellent camouflage against tree bark.

Common east of the Rockies in woods, suburbs, and parks, the Eastern Screech-Owl is found wherever trees are, and they're even willing to nest in backyard nest boxes. These supremely camouflaged birds hide out in nooks and tree crannies through the day, so train your ears and listen for them at night. Almost any habitat with sufficient tree cover will do. Tree cavities or nest boxes are essential, and fairly open understories are preferred, but Eastern Screech-Owls live and breed successfully in farmland, suburban landscapes, and city parks.

Eastern Screech-Owls eat most kinds of small animals, including birds and mammals as well as surprisingly large numbers of earthworms, insects, crayfish, tadpoles, frogs, and lizards. They eat many kinds of mammals, including rats, mice, squirrels, moles, and rabbits. Small birds taken as prey include flycatchers, swallows, thrushes, waxwings, and finches, as well as larger species such as jays, grouse, doves, shorebirds, and woodpeckers. This owl is agile enough to occasionally prey on bats, and can rarely even be cannibalistic. When prey is plentiful, Eastern Screech-Owls cache extra food in tree holes for as long as four days.



Eastern Screech-Owls nest in holes and cavities, but never dig a cavity themselves. Thus, they depend on tree holes opened or enlarged by woodpeckers, fungus, rot, or squirrels. They often occupy abandoned woodpecker nest holes. Eastern Screech-Owls readily accept nest boxes, including those built for Wood Ducks or Purple Martins, and sometimes nest in wood piles, mailboxes, or crates left on the ground.

- <https://www.birdsandblooms.com/birding/bird-species/birds-of-prey/owls-north-america/>
- <https://www.audubon.org/field-guide/bird/eastern-screch-owl>





## Devastated by Disease, Federal Officials Propose Listing Northern Long-eared Bat as Endangered

<https://www.wpr.org/devastated-disease-federal-officials-propose-listing-northern-long-eared-bat-endangered>



Northern long-eared bats are known for hiding in cracks and crevices within caves, making them difficult to find. Now, they're at risk of disappearing altogether.

The U.S. Fish and Wildlife Service [announced a proposal to list the bat as an endangered species](#) on Tuesday as a deadly fungal disease has decimated the once-common bat species. "White nose syndrome is devastating northern long-eared bats at unprecedented rates, as indicated by this science-based finding," said Charlie Wooley, the agency's regional director, in a statement.

The disease that looks like white fuzz on bats' skin was [first discovered](#) in New York in 2007. Within 15 years, the bats' population has [declined 97 to 100 percent](#) across nearly 80 percent of the species' range.

The northern long-eared bat has been found in [37 states](#), including Wisconsin. The bat is one of eight species native to Wisconsin and one of four species known as cave bats that hibernate during the winter.

The Wisconsin Department of Natural Resources has a bat monitoring team that had been tracking the state's bat species prior to the first detection of the deadly fungal disease in 2014 at an abandoned mine site in far southwestern Wisconsin.

White nose syndrome hasn't only devastated long-eared bats. It has [caused the decline of other species](#) in Wisconsin. But the northern long-eared bat has been hit the hardest, according to Owen Boyle, species management section leader in the DNR's Bureau of Natural Heritage Conservation. "It's really an unprecedented wildlife conservation disaster," said Boyle. "We haven't seen anything like this, arguably, since maybe the passenger pigeon extinction."



White nose syndrome fungus on a bat

Boyle said they've only found a small handful of northern long-eared bats each winter during surveys, which are currently underway. Less than a dozen bats are typically found each year statewide compared to hundreds in the past. "So, 99 percent of the population in Wisconsin is just gone from white-nose syndrome," said Boyle. The bats typically spend the winter in caves, abandoned mines, rail tunnels and even manmade caves once

used to store beer. "The fungus that causes white nose syndrome, it wakes those bats up over and over again throughout the course of the winter," said Boyle. "And so with no food to replenish the energy that they're using, the bats will often end up starving or dying of exposure."

The bats' population is also [threatened](#) by other factors, including climate change, habitat loss and wind energy development. The wind energy industry has developed 16 habitat conservation plans with more than a dozen other plans under development, according to the U.S. Fish and Wildlife Service.



The Wisconsin DNR said hundreds of long-eared bats were once documented during winter surveys, but now less than a dozen have been seen statewide each year.

During the rest of the year, the bats spend their time foraging and roosting in forested habitat. They often roost alone or in small numbers and emerge at dusk to feed on insects and pests that often affect trees and crops. One [study](#) estimated the loss of bats facing increasing pressures from white nose syndrome and wind developments could cost agriculture more than \$3.7 billion each year.

Wisconsin listed the long-eared bat as a state threatened species in 2011, and the U.S. Fish and Wildlife Service listed the species as threatened in 2015. The Center for Biological Diversity [sued](#) the federal agency, challenging the designation. Ryan Shannon, an attorney for the conservation group, said the 2015 listing included a special rule that exempted activities that threatened the bat's habitat. "They largely exempted all activities that affected bats' habitat, such as mining or timber sales and logging," said Shannon. "And so, we challenged that in court, arguing that the bat based on the best available science should have been listed as endangered."

Multiple groups [filed a brief](#) in that case to support the agency listing the species as threatened, including the Great Lakes Timber Professionals Association, American Farm Bureau Federation and Forest Landowners Association. Forest industry officials have expressed concerns that the bat's listing would hinder forest management.

A federal judge [sided](#) in part with the conservation group last year, ordering the agency to determine whether the bat should be listed as endangered by the end of this year. In its review, the U.S. Fish and Wildlife Service found white-nose syndrome is expected to [affect the bats' entire range](#) in the U.S. by 2025. A [public hearing](#) will be held about the proposed designation on April 7. The agency is [accepting comments](#) on the proposed rule until May 23, and a final decision will be announced in November. For more, visit <https://fws.gov/press-release/2022-03/proposal-reclassify-northern-long-eared-bat-endangered>.



### One of Marinette County's Best-Kept Secrets – the Harmony Arboretum & Demonstration Gardens

<https://www.marinettecounty.com/departments/land-information/environmental-education/harmony-arboretum/>

**Looking for someplace new to explore this year?** Check out the Harmony Arboretum & Demonstration Gardens near Peshtigo! Located 7 miles west of Marinette WI on Hwy 64, then 1/2 mile south on County E, the Harmony Arboretum & gardens is open to the public year-round. For two years, public programs have been put on hold at Harmony due to COVID, but this year some public programs will resume. More information will be in upcoming NWJs, publicized in local papers, and on social media. *Here are some upcoming events at Harmony this spring/summer:*

**Spring Wildflower Walk – Saturday, May 7**  
9:00 -11:00 am. Join local wildflower enthusiasts on a guided tour of the spring wildflowers in the Harmony Hardwoods Memorial Forest! Participants may see wildflowers such as trillium, bloodroot, bellwort, Dutchman's breeches, and marsh marigolds. Wear good walking shoes or hiking boots and dress for the weather, and insect repellent is recommended.

**Spring Wildflower Sale – Saturday, May 21**  
*More details to come!* Annuals, perennials, outdoor art, and more – proceeds help support education programs at the Arboretum.



**Summer Garden Walk - Saturday, July 30th**  
9:00 am - 4:00 pm. We have some gorgeous gardens for you to tour and are in the process of finalizing details! Funds raised are used to support educational programs. The walk is self-guided and the gardens may be visited in any order.

For more about Harmony, visit <https://marinette.extension.wisc.edu/horticulture/harmony-arboretum/>.



NLMGA is an Association of garden volunteers who enjoy meeting, learning and passing on that learning to others. They meet monthly on the second Thursday (varied locations). Membership is currently \$20 per year and includes a monthly newsletter. Members maintain the Harmony Display and Demonstration Gardens, a 3-acre area which is part of the Harmony Arboretum. Visit them on Facebook: <https://www.facebook.com/Northern-Lights-Master-Gardeners-Association-Volunteers-NLMGA-128084290595975/>.

*Interested in becoming a Master Gardener?* Visit <https://mastergardener.extension.wisc.edu/become-a-master-gardener/> for more information.









## Never Plant These Invasive Shrubs (and What to Grow Instead!)

<https://www.birdsandblooms.com/gardening/gardening-basics/alternatives-invasive-shrubs/>



Plant winterberry holly instead of pyracantha (firethorn), which can be invasive in many areas.

Exotic invasive shrubs pose a threat to natural areas. The qualities that make them attractive and [low maintenance](#) also allow them to survive and spread when they jump the garden fence into the woods and fields. Once there, they outcompete [native plants](#) that are vital to the survival of wildlife. Removing any invasive shrubs already in your yard can be easier said than done. Some are still commonly sold at garden centers and have design value in the landscape. And some even offer [food for birds](#) or butterflies, so it might seem counterintuitive to eliminate them.

Remember, though, that even if some wildlife benefit from these shrubs, they can destroy habitat for many other species. **In the big picture, native plants provide the best [wildlife habitat](#).** Luckily, there are great native alternatives to invasive shrubs that can play the same role in the landscape.

### Invasive Shrubs: Butterfly Bush

Renowned for its ability to attract butterflies, butterfly bush has become invasive in the Pacific Northwest and much of the East. If you want to grow this plant, look for sterile, seedless cultivars like [Blue Chip](#).

### Butterfly Bush Alternatives

Buttonbush (below), New Jersey tea, summersweet and elderberry are excellent shrub alternatives for the East; all are irresistible to butterflies. Elderberry works in the West, too, along with western spirea, California lilac, blackbrush and other *ceanothus* species. And unlike butterfly bush, which doesn't support caterpillars, many of these shrubs are also caterpillar [host plants](#).



### Invasive Shrubs: Burning Bush

This ubiquitous shrub is popular for its deep red fall foliage, but it's a woodland invasive in the East, Midwest and South.

### Burning Bush Alternatives

Native shrubs that provide an equally stunning scarlet display include [sweetspire](#), blueberry, and fothergilla. These vibrant alternatives also offer [nectar to pollinators](#), berries for birds or even both.

### Invasive Shrubs: Japanese Barberry and Pyracantha

These invasive shrubs feature bright red or orange berries. Birds eat them and spread the

seeds beyond the garden, where they germinate and dominate. Barberry (below) is invasive in the Northeast, the Great Lakes area and parts of the Northwest, while pyracantha is a problem in California, Texas and parts of the Deep South.



### Barberry and Pyracantha Alternatives

Many native berry-producing shrubs are better choices, including [dogwoods](#), winterberry holly, elderberry, chokeberry, native viburnums, blueberry, bayberry, wax myrtle, Oregon grape and manzanita. Spicebush has red berries and is also unpalatable to deer, just like these two invasives. Grow [native ornamental grasses](#) for birds and butterflies, like prairie dropseed (below) and little bluestem.



### Other Invasive Shrubs to Avoid

You might have invasive shrubs on your property that aren't sold in nurseries and that you didn't deliberately plant. With these long-established invasives, it's important to put something in their place after removal so that the invasive plant doesn't come right back. *Multiflora rose*, *Russian or autumn olive* (below), *Himalayan blackberry*, *buckthorn*, and *privet or bush honeysuckle* **should all be removed and replaced.**



### Native Shrub Alternatives

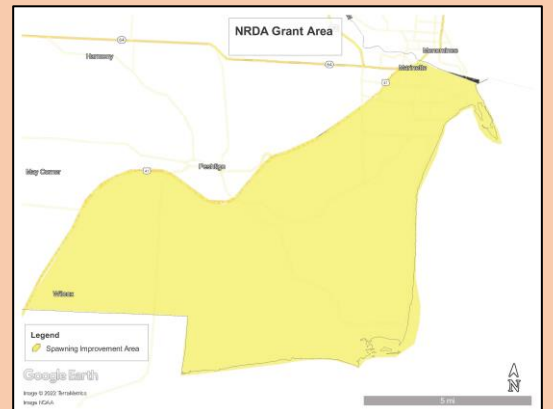
[Witch hazel](#) (below), Carolina rose, highbush blueberry or cranberry, snowberry, and hawthorn are all good alternatives. Try any combination of native plants that suits the landscape and offers benefits for wildlife.



For more about native shrub alternatives, visit <https://www.ecolandscaping.org/11/designing-ecological-landscapes/native-plants/small-native-shrubs-to-replace-commonly-used-exotics/> & <https://grownative.org/>.

## Marinette County Receives Fish Spawning Habitat Improvement Grant

Marinette County received a grant through Natural Resource Damage Assessment and Restoration Program (NRDA) to improve fish spawning habitat and stream access to suitable wetlands. The goal of this project is to improve spawning habitat for fish affected by PCB's (polychlorinated biphenyls) in Green Bay. The target area of these improvement projects are wetlands and tributaries on the Bay of Green Bay and sites that are East of Highway 41.

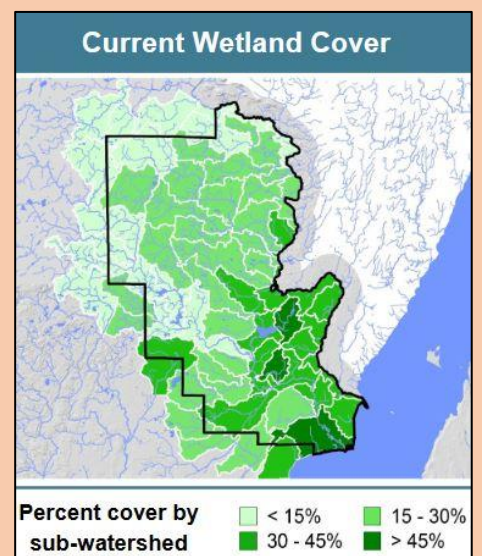


This project aims to improve spawning rates for various fish species including northern pike, lake sturgeon, walleye, and muskellunge. The project will focus on creating and restoring wetlands, adding an additional 990 feet of rip-rap spawning area, and remove impediments such as improperly placed culverts and rock dams to improve fish access to these sites.

The wetlands and other improvements will also provide habitat for other non-fish species such as waterfowl. Marinette County will be partnering with Natural Resource Conservation Service (NRCS) to improve land practices and enhance habitat in and around selected project sites.



If you are interested in participating or are looking for more information on the project, please reach out to Chuck Druckrey at the Marinette County Land Information Department at (715)-732-7528 or at [CDruckrey@MarinetteCounty.com](mailto:CDruckrey@MarinetteCounty.com).



Map from [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)





## FIVE FASCINATING FACTS ABOUT SPIDERS

<https://www.reconnectwithnature.org/News-Events/The-Buzz/five-fascinating-facts-about-spiders>



A dark fishing spider, one of 3 species of 'fishing spiders' in Wisconsin who belong to the family Pisauridae – this is a female, who is twice the size of a male. Members of this family have the longest legspan of any spider in Wisconsin.

Whether you love them, hate them or simply tolerate them, spiders are a part of the world around us and we have to live with them. Spiders are a kind of **arachnid**, a group of arthropods that also includes mites, ticks and scorpions. All spiders (and arachnids) have eight legs, and almost all of them have eight eyes, but beyond these similarities there's a lot of variation among the approximately 50,000 spider species inhabiting Earth.

That's right - the world is home to about 50,000 different kinds of spiders. They live in almost every type of habitat — forests, deserts and even our own homes. There are even spiders that live on water and underneath water. And while it may seem like there are plenty of spiders to go around, some species are endangered, affected by habitat loss and invasive species that can dominate their normal environments.



A black and yellow garden spider, commonly seen in gardens and fields on shrubbery and tall flowers in late summer and fall. Their webs are particularly large, up to 1 foot in diameter and are characterized by the white zig-zag band of silk that runs down the center of the web, called a *stabilimentum*.

### 1. ALMOST ALL SPIDERS ARE VENOMOUS, BUT ALMOST NONE CAN HARM YOU

We're just going to level with you: The vast majority of the world's spiders are venomous, according to the [Burke Museum](#). But before you let that taint your view of spiders, you should know that's just half the story. Here's the rest: **of the 50,000 known spider species in the world, only 25 have venom that can cause harm to humans.** That's just 1/20 of 1% of spiders that are dangerous to humans. We aren't part of their normal diet, so they only bite people as a last resort.

In the United States, dying from a spider bite is extremely rare, with less than three deaths per year. In the upper Midwest, the only spiders that can cause harm to humans are brown recluse and black widow spiders, according to the [Illinois Department of Public Health](#).

### 2. THEY CAN'T CHEW

Almost all spiders are carnivorous, so it may come as a surprise to learn that they can't chew, like we do. Unlike mammals and most insects, spiders do not have mandibles that aid in biting and chewing. Instead, they have **chelicerae**, which are external structures that work somewhat like a jaw does.

Spiders use their chelicerae to hold prey in place while they inject it with venom. Instead of chewing their food with mandibles, spiders will first "spit" enzymes either on or in their prey to liquify it. They then eat the prey by sucking in the juices created by the enzymes with their mouthparts.

### 3. THEY ALL MAKE SILK, BUT THEY DON'T ALL MAKE WEBS

All spiders make silk — it's one of the things that makes a spider a spider — but not all spiders make webs. A spider web is technically any structure made of silk that is used to catch prey, and about half of all known spider species catch prey with silky webs. Among spiders that don't make webs, silk is used in many different ways. Some build nests and cocoons from their silk, and some use silk strands to wrap up their prey. Silk strands can also be used as drop or anchor lines, trailing behind them as they move about. Spiders even sometimes eat their silk and use it to make new silk.



A goldenrod crab spider ambushing a bee on a flower.

### 4. THEY CAN BE VERY BIG AND VERY SMALL AND A LOT OF SIZES IN BETWEEN

When you think about the biggest spiders you've seen, wolf spiders may come to mind. These spiders, which include hundreds of different species, can be between a half-inch to an inch or two long, but they aren't even close to the biggest spiders in the world. It turns out the title of world's 'largest spider' could be awarded to two different species, depending on whether the crowning criteria is leg span or body mass. By leg span, the giant huntsman is the largest, with a leg span of as great as 12 inches, [Live Science](#) reports. By weight, a tarantula species called the Goliath birdeater takes the cake, weighing in at 6 ounces. The giant huntsman lives in Laos, and the Goliath birdeater lives in tropical rainforests in South America.

**5. THERE'S A DAY DEDICATED TO SAVING THEM**  
National Save a Spider Day, celebrated each year on March 14, certainly isn't on par with holidays like Thanksgiving and Halloween, but raising awareness about the importance of spiders is as good a reason for a holiday as any. It's a good time to step a little more carefully and try to tolerate any eight-legged creatures you come across. Why save spiders? **Spiders play an important role in the ecosystem, primarily as predators of insects. Their hunting of these insects helps keep their populations in check and food chains in balance.**

- ✦ <https://insectid.wisc.edu/online-insect-identification-tool/spiders/>
- ✦ <https://www.techtimes.com/articles/14002/20140825/giant-fishing-spiders-spotted-wisconsin.htm>
- ✦ <https://www.burkemuseum.org/collections-and-research/biology/arachnology-and-entomology/spider-myths>
- ✦ <https://www2.illinois.gov/dnr/outreach/kid/conservation/Pages/ArchiveSep2020.aspx>

## Protect Migrating Birds from Window Collisions

<https://content.govdelivery.com/accounts/MDNR/bulletins/3102a98>



The Great Lakes lie at the intersection of two migratory flyways, or superhighways, which bring over 350 bird species through the region each spring. While a beautiful spectacle for us, migration is a harrowing journey for birds. One of the biggest dangers they face - collisions with windows and other glass surfaces.

Migrating songbirds like indigo buntings (above) and Swainson's thrushes are at [highest risk of building collisions](#). These species also face steep population declines; doing what we can to prevent window collisions will help ensure their survival. Collisions with human-made structures are a leading cause of bird deaths in the United States, causing up to 1 billion bird deaths each year in North America. Birds cannot detect glass, and collisions are just as likely regardless of bird health or age.

When birds hit windows, it is a life-threatening occurrence. Even birds that are able to fly away are likely to succumb to their injuries later. The good news is that there are opportunities to make your home or office more bird-friendly:

- **Identify problematic windows.** To see which windows have caused collisions, check them from outside two or three times a week. Look for imprints, smudges or feathers on the glass, injured or dead birds, or clumps of feathers within 6-8 feet of the glass.
- **Install bird-friendly solutions.** Patterns on the outside surface of glass are the best way to reduce collisions. Studies have shown that exterior window patterns should be about 2-4 inches apart; 2x2-inch spacing is even better for smaller species, like ruby-throated hummingbirds, which are more prone to window-collisions.



For a list of quick, affordable ways to protect birds from your windows, check out American Bird Conservancy's [bird-friendly windows flyer](#) and [bird-friendly products database](#), Animal Help Now's [flyer on preventing bird window strikes](#) and Audubon's resources on [reducing collisions with glass](#). Learn about [Audubon's Lights Out Program](#) and how to make your hometown safer for migratory birds.

For information on how you can get involved in Safe Passage Great Lakes building monitoring efforts, and what to do if you find a window-collision survivor, visit the [Audubon Great Lakes website](#).

